

### **REMARKS/ARGUMENTS**

This is in response to the Final Office Action dated April 9, 2003. The Examiner therein rejects claims 1-22.

Claims 1, 13, 14, and 16 have been amended. Claims 19-22 have been canceled.

Claims 1-18 are thus pending.

Reconsideration of the pending claims is respectfully requested.

### **Claim Rejections Under 35 USC 112**

Claims 1-22 are rejected under 35 USC 112, second paragraph.

Claim 1 has been rewritten and no longer recites: "a tunable edge-emitting semiconductor laser including a resonant cavity delimited by two reflectors, one which is a fixed reflector and the other of which is a *mobile* reflector, and including an active section with gain of length L1 and a tunable section of L2, *characterized in* that the total length of the cavity  $L=L1+L2$  is less than or equal to 20um."

Claims 19-22 are canceled.

Withdrawal of the 35 USC 112, second paragraph rejection is respectfully requested.

### **Claim Rejections Under 35 USC 103**

Claims 1-5, 10-12, 17, and 18 are rejected under 35 USC 103 as being unpatentable over Karioja at el. (U.S. Patent No. 6,192,059).

Karioja teaches various laser configurations with various restrictions on the distance between the laser source and a mirror control element (column 1, lines 51-55; column 2, lines 18-25; column 4, lines 23-26; column 4, lines 44-46).

Claim 1 includes the claim language: "a total length of the active section and the tunable section is less than or equal to 20  $\mu\text{m}$ ". In contrast, Karioja places no restrictions on the size of the active section.

Because Karioja fails to teach or suggest the claim language of claim 1, applicant respectfully requests withdrawal of the 35 USC 103 rejection to claims 1-5, 10-12, 17, and 18.

**Claim Rejections Under 35 USC 103**

Claims 6-9 and 13-16 are rejected under 35 USC 103 as being unpatentable over Karioja et al. (U.S. Patent No. 6,192,059) in view of McClland et al. (U.S. Patent No. 6,201,629).

Because both Karioja and McClland, separately and in combination, fails to teach or suggest the claim language “a total length of the active section and the tunable section is less than or equal to 20  $\mu\text{m}$ ” of claim 1, applicant respectfully requests withdrawal of the 35 USC 103 rejection to claims 6-9 and 13-16.

**Claims Rejections Under 35 USC 103**

Claims 6-9 and 13-16 are rejected under 35 USC 103 as being unpatentable over Karioja et al. (U.S. Patent No. 6,192,059) in view of Uenishi et al. (“Tunable laser diode using a nickel micromachined external mirror”, Electronics Letters, 20<sup>th</sup> June 1996 Vol.32 No. 13 pp. 12-7-1208).

Because both Karioja and Uenishi, separately and in combination, fails to teach or suggest the claim language “a total length of the active section and the tunable section is less than or equal to 20  $\mu\text{m}$ ” of claim 1, applicant respectfully requests withdrawal of the 35 USC 103 rejection to claims 6-9 and 13-16.

**Other Remarks**

Applicants note that the claim listing in applicant’s amendment dated March 4, 2003 lists claim 16 as including the language “according to any one of claims 12”. However, in applicant’s preliminary amendment dated April 2, the language “any one of claims” was deleted from claim 16. In the current amendment applicant herein deletes the language “any one of claims” from claim 16.

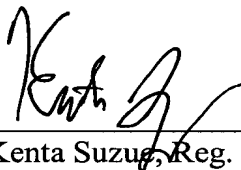
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**CONCLUSION**

It is submitted that the present application is in form for allowance, and such action is respectfully requested. Should the Examiner have any questions, please contact the undersigned attorney.

The Commissioner is authorized to charge any additional fees which may be required, including petition fees and extension of time fees, to Deposit Account No. 23-2415 (Docket No. 20397.331.831).

Respectfully submitted,

By   
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